

**QUICK SURVEY WOULD YOU LIKE  
FREE INTERNET?** ☐ Yes ☐ No



[IPN Home](#) | [Search](#) | [Order](#) | [Shopping Cart](#) | [Login](#) | [Help](#)



## WO9520811A1: LASER ILLUMINATED DISPLAY SYSTEM

[View Images \(37 pages\)](#) | [View Cart](#)

[Add to cart: PDF \(3520 KB\)](#) | [TIFF \(2780 KB\)](#) | [Fax](#) | [More choices...](#)

Inventor(s): **WAARTS, Robert, G.  
SCIFRES, Donald, R.  
WELCH, David, F.  
LANG, Robert, J.**

Applicant(s): **SDL, INC.**

Issued/Filed Dates: **Aug. 3, 1995 / Jan. 12, 1995**

Application Number: **WO1995US0000581**

IPC Class: **G09G 003/22; G09G 003/28;**

Priority Number(s): **Jan. 31, 1994 US1994000189418 Family**

Designated Countries: **AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, JP, LU, MC, NL, PT, SE**

Foreign References: **none**

[Show the 1 patents that reference this one](#)

Powered by **DB2**  
and **Net.Data**

[Nominate this  
invention  
for the Gallery...](#)

**Alternate  
Searches**

  
[Patent Number](#)

  
[Boolean Text](#)

  
[Advanced Text](#)

**PatentMiner**

SEARCH PATENT FULL TEXT  
WITH NATURAL LANGUAGE

[Legal](#) | [IBM](#) | [FAQ](#) | [Feedback](#) | [Contact Us](#)

**BEST AVAILABLE COPY**



PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION  
International Bureau


INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(54) International Patent Classification 5: G09G 3/22, 3/28		A1	(11) International Publication Number: WO 95/20811
			(43) International Publication Date: 3 August 1995 (US/8,95)
(21) International Application Number: PCT/US95/02521		(31) Designated States: JP, EP, DE, AT, IT, DK, ES, FR, GB, GR, IE, IL, LU, MC, NL, PT, SE.	
(22) International Filing Date: 12 January 1995 (12.01.95)		Published With international search report.	
(30) Priority Data: 189,418 31 January 1994 (31.01.94) US			
(71) Applicant: SLL, INC. (US/US); 80 Rose Orchard Way, San Jose, CA 95134 (US).			
(72) Inventors: WAARIS, Robert, G.; 958 Van Arken Circle, Palo Alto, CA 94303 (US); SCHWES, David, R.; 80 Rose Orchard Way, San Jose, CA 95134 (US); WFLCH, David, P.; 1894 Quil Knoll Lane, Menlo Park, CA 94025 (US); LANC, Robert, J.; 7580 Olive Drive, Pleasanton, CA 94588 (US).			
(74) Agent: SCURLOCK, Thomas, Schindler & McHugh, P.O. Box 2-E, San Jose, CA 95109-0005 (US).			
(54) Title: LASER ILLUMINATED DISPLAY SYSTEM			
(57) Abstract			
<p>A display system in which lasers sequentially illuminate the pixels of a spatially modulating display panel (11, 13, 15), such as a liquid crystal display or microdisplay array. At least three sources at least one of which is a laser with each different wavelengths are used, such as laser diode-based sources (31, 33, 35) producing red, green and blue light. The laser may be pulsed rapidly in sequence to provide time multiplexed illumination of all of the display pixels or may be operated in continuous (cw) mode, using color filters on the display, phase plates (147) or microlens arrays to image light spots (148) of each color only on designated pixels. Two sets of laser sources (123), either orthogonally linearly polarized or at slight different wavelengths, can be used to create 3-D images. Each set may illuminate a different display panel, one for each eye, or the two sets may be time multiplexed using the same display panel (125). A viewer has polarizing or bandpass filters in front of each eye to separate the binocular images. Rhynchop coupling (39) of the laser sources (31, 33, 35, 37) can be used to physically separate three sources and their power supply from the display panel (115).</p>			

